Working with Java Data Types - 0

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         Double [] arr = new Double[2];
         System.out.println(arr[0] + arr[1]);
     }
}
```

A - NullPointerException is thrown at runtime

B - Compilation error

C - ClassCastException is thrown at runtime

D - 0.0

Working with Java Data Types - 1

What will be the result of compiling and executing Test class?

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<Integer> list = new ArrayList<>();
         list.add(100);
         list.add(200);
         list.add(100);
         list.add(200);
         list.remove(100);

         System.out.println(list);
     }
}
```

A - Compilation error

B - Exception is thrown at runtime

C - [200]

D - [200, 200]

E - [200, 100, 200]

F - [100, 200, 200]

Working with Java Data Types - 2

Given the code of Test.java file:

```
class Point {
     int x;
     int y;
     void assign(int x, int y) {
         x = this.x;
         this.y = y;
     }

     public String toString() {
         return "Point(" + x + ", " + y + ")";
     }
}

public class Test {
     public static void main(String[] args) {
         Point p1 = new Point();
         p1.x = 10;
         p1.y = 20;
         Point p2 = new Point();
         p2.assign(p1.x, p1.y);
         System.out.println(p1.toString() + ";" + p2.toString());
     }
}
```

What will be the result of compiling and executing Test class?

A - Point(10, 20);Point(0, 20)

B - Point(0, 20);Point(10, 20)

C - None of the other options

D - Point(10, 20);Point(10, 20)

E - Point(0, 20);Point(0, 20)

Working with Java Data Types - 3

What will be the result of compiling and executing Test class?

```
public class Test {
    char var1;
    double var2;
    float var3;

    public static void main(String[] args) {
        Test obj = new Test();
        System.out.println(">" + obj.var1);
        System.out.println(">" + obj.var2);
        System.out.println(">" + obj.var3);
    }
}
```

A -

```
>null
>0.0
>0.0f
```

B -

```
>null
>0.0
>0.0
```

C -

```
>
>0.0
>0.0f
```

D -

```
>
>0.0
>0.0
```

Working with Java Data Types - 4

How many objects of Pen class are eligible for Garbage Collection at Line 4?

```
class Pen {

}

public class TestPen {
     public static void main(String[] args) {
         new Pen(); //Line 1
         Pen p = new Pen(); // Line 2
         change(p); //Line 3
         System.out.println("About to end."); //Line 4
     }

     public static void change(Pen pen) { //Line 5
         pen = new Pen(); //Line 6
     }
}
```

A - 1

B - 2

C - 0

D - 3

Working with Java Data Types - 5

What will be the result of compiling and executing Test class?

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<Integer> list = new ArrayList<>();
         list.add(100);
         list.add(200);
         list.add(100);
         list.add(200);
         list.remove(new Integer(100));

         System.out.println(list);
     }
}
```

A - [200]

B - Exception is thrown at runtime

C - [200, 200]

D - Compilation error

E - [200, 100, 200]

F - [100, 200, 200]

Working with Java Data Types - 6

What will be the result of compiling and executing Test class?

```
public class Test {

     private static void add(double d1, double d2) {
         System.out.println("double version: " + (d1 + d2));
     }

     private static void add(Double d1, Double d2) {
        System.out.println("Double version: " + (d1 + d2));
     }

     public static void main(String[] args) {
         add(10.0, null);
     }
}
```

A - double version: 10.0

B - An exception is thrown at runtime

C - Double version: 10.0

D - Compilation error

Working with Java Data Types - 7

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         System.out.println(new Boolean("ture"));
     }
}
```

A - An exception is thrown at runtime

B - Compilation error

C - false

D - true

Working with Java Data Types - 8

Consider below code:

```
public class Test {
    public static void main(String[] args) {
        char c = 'Z';
        long l = 100_00l;
        int i = 9_2;
        float f = 2.02f;
        double d = 10_0.35d;
        l = c + i;
        f = c * l * i * f;
        f = l + i + c;
        i = (int)d;
        f = (long)d;
    }
}
```

Does above code compile successfully?

A - Yes

B - No

Working with Java Data Types - 9

How can you force JVM to run Garbage Collector?

A - By setting the reference variable to null.

B - By calling: Runtime.getRuntime().gc();

C - JVM cannot be forced to run Garbage Collector.

D - By calling: System.gc();

Working with Java Data Types - 10

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         Boolean b1 = new Boolean("tRuE");
         Boolean b2 = new Boolean("fAlSe");
         Boolean b3 = new Boolean("abc");
         Boolean b4 = null;
         System.out.println(b1 + ":" + b2 + ":" + b3 + ":" + b4);
     }
}
```

A - Compilation error

B - true:false:false:null

C - false:false:false:null

D - false:false:true:null

Working with Java Data Types - 11

What will be the result of compiling and executing TestStudent class?

```
//TestStudent.java
class Student {
     String name;
     int age;
     boolean result;
     double height;
}

public class TestStudent {
     public static void main(String[] args) {
         Student stud = new Student();
         System.out.println(stud.name + stud.height + stud.result +
        stud.age);
     }
}
```

A - null0.0false0

B - null0false0

C - null0.0ffalse0

D - null0.0true0

Working with Java Data Types - 12

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         m(1);
     }

     private static void m(Object obj) {
         System.out.println("Object version");
     }

     private static void m(Number obj) {
         System.out.println("Number version");
     }

     private static void m(Double obj) {
         System.out.println("Double version");
     }
}
```

A - Object version

B - Double version

C - Compilation error

D - Number version

Working with Java Data Types - 13

What will be the result of compiling and executing Test class?

```
public class Test {
     static Boolean[] arr = new Boolean[1];
     public static void main(String[] args) {
         if(arr[0]) {
             System.out.println(true);
         } else {
             System.out.println(false);
         }
     }
}
```

A - true

B - Compilation error

C - ArrayIndexOutOfBoundsException is thrown at runtime

D - false

E - NullPointerException is thrown at runtime

Working with Java Data Types - 14

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         Boolean b = new Boolean("tRUe");
         switch(b) {
             case true:
                 System.out.println("ONE");
             case false:
                 System.out.println("TWO");
             default:
                 System.out.println("THREE");
         }
     }
}
```

A - None of the other options

B - TWO THREE

C - THREE

D - ONE TWO THREE

Working with Java Data Types - 15

Given the code:

```
public class Pen {
     public static void main(String[] args) {
         Pen p1 = new Pen(); //Line 1
         Pen p2 = new Pen(); //Line 2
         p1 = p2; //Line 3
         p1 = null; //Line 4
     }
}
```

When is the Pen object, created at Line 1 eligible for Garbage Collection?

A - After Line 2

B - After Line 3

C - After Line 4

D - At the end of main method

Working with Java Data Types - 16

Consider below code:

```
public class Counter {
     int count;

     private static void increment(Counter counter) {
         counter.count++;
     }

     public static void main(String [] args) {
         Counter c1 = new Counter();
         Counter c2 = c1;
         Counter c3 = null;
         c2.count = 1000;
         increment(c2);
     }
}
```

On executing Counter class, how many Counter objects are created in the memory?

A - 1

B - 4

C - 3

D - 2

Working with Java Data Types - 17

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         byte b1 = (byte) (127 + 21);
         System.out.println(b1);
     }
}
```

A - -128

B - 148

C - -108

D - Compilation error

Working with Java Data Types - 18

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         Boolean [] arr = new Boolean[2];
         System.out.println(arr[0] + ":" + arr[1]);
     }
}
```

A - null:null

B - false:false

C - true:true

D - NullPointerException is thrown at runtime

Working with Java Data Types - 19

What will be the result of compiling and executing Test class?

```
public class Test {
    public static void main(String[] args) {
        String [] arr = {"abc", "TrUe", "false", null, "FALSE"};
        for(String s : arr) {
            System.out.print(Boolean.valueOf(s) ? "T" : "F");
        }
    }
}
```

A - NullPointerException is thrown at runtime

B - FTFFF

C - FFFFF

D - TITFT

E - TTFTT

Working with Java Data Types - 20

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         extractInt(2.7);
         extractInt(2);
     }

     private static void extractInt(Double obj) {
         System.out.println(obj.intValue());
     }
}
```

A - An exception is thrown at runtime

B - 3 2

C - 2 2

D - Compilation error in extractInt method

E - Compilation error in main method

Working with Java Data Types - 21

Wrapper classes are defined in which of the following package?

A - default package

B - java.io

C - java.lang

D - java.util

Working with Java Data Types - 22

What will be the result of compiling and executing Test class?

```
public class Test {
    public static void main(String[] args) {
        String [] arr = {"abc", "TrUe", "false", null, "FALSE"};
        for(String s : arr) {
            System.out.print(Boolean.valueOf(s) ? "T" : "F");
        }
    }
}
```

A - NullPointerException is thrown at runtime

B - FTFFF

C - FFFFF

D - TITFT

E - TTFTT

Working with Java Data Types - 23

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         extractInt(2.7);
         extractInt(2);
     }

     private static void extractInt(Double obj) {
         System.out.println(obj.intValue());
     }
}
```

A - An exception is thrown at runtime

B - 3 2

C - 2 2

D - Compilation error in extractInt method

E - Compilation error in main method

Working with Java Data Types - 24

Wrapper classes are defined in which of the following package?

A - default package

B - java.io

C - java.lang

D - java.util

Working with Java Data Types - 25

Range of short data type is from -32768 to 32767

Which of the following code segments, written inside main method will compile successfully?

Select ALL that apply.

A - int i7 = 10; short s7 = 17;

B - final int i4 = 40000; short s4 = 14;

C - short s1 = 10;

D - final int m = 25000; final int n = 25000; short s6=m+n;

E - final int i5 = 10; short s5 = 15 + 100;

F - short s2 = 32768;

G - final int i3 = 10; short s3 = 13;

Working with Java Data Types - 26

Consider below statements:

1. int x = 5___0;
2. int y = ___50;
3. int z = 50___;
4. float f = 123.76_86f;
5. double d = 1_2_3_4;

How many statements are legal?

A - Four statements only

B - Two statements only

C - One statement only

D - Three statements only

E - All 5 statements

Working with Java Data Types - 27

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        boolean b1 = 0;
        boolean b2 = 1;
        System.out.println(b1 + b2);
    }
}
```

What is the result of compiling and executing Test class?

A - Compilation error

B - false

C - true

D - 1

E - 0

Working with Java Data Types - 28

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        char c1 = 'a'; //ASCII code of 'a' is 97
        int i1 = c1; //Line n1
        System.out.println(i1); //Line n2
    }
}
```

What is the result of compiling and executing Test class?

A - 97

B - Line n1 causes compilation failure

C - a

D - Line n1 causes runtime error

Working with Java Data Types - 29

Given code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        byte b1 = 10; //Line n1
        int i1 = b1; //Line n2
        byte b2 = i1; //Line n3
        System.out.println(b1 + i1 + b2);
    }
}
```

What is the result of compiling and executing Test class?

A - Line n1 causes compilation error

B - Line n2 causes compilation error

C - Line n3 causes compilation error

D - 30 is printed on to the console